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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

MANNING, JOHN

ART UNIT PAPER NUMBER

2614

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|-------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/750,049 | SUZUKI, MOTOYOSHI | |
| | Examiner | Art Unit | |
| | John Manning | 2614 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Baum et al (US Pat No 5,868,578).

In regard to claim 1, the claimed limitation of "an input unit inputting segmentation information indicating a time slice for each piece of picture data continuous time series about subject, and retrieval data indicating an attribute of the subject corresponding each piece of picture data assigned to each time slice" is met by Figures 2, 7 and 11A-D. "The video cameras are preferably high-speed digital type cameras facilitating recording at a rate of 1,000 frames per second or greater. Such cameras, which may be purchased from the Kodak Company as Model Ektapro may be used to measure all pitched and batted ball characteristics, including speeds, pitcher movements, pitch type, location at the batter, and direction of hit" (Col 3, Lines 54-59). "FIGS. 11A to 11D depict a variety of batter images captured according to the invention along with

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statistical data superimposed thereon" (Col 6, Lines 46-48). The claimed limitation of "a storage segmenting the continuous picture data according the segmentation information, associating each piece of picture data obtained by segmenting data with corresponding retrieval data, and storing associated data" is also met Figures 2, 7 and 11A-D. "Each device is continuously monitored by the computer system 110, and once the devices are set out in the evaluation area, all devices make completely automatic measurements of each pitch and hit without any action of the operator" (Col 3, Lines 48-52). "The sequence of video pictures or frames seen by the side-view camera for ball position 0 through 5 is shown in the sketches in the bottom of FIG. 2. In frame 0 the camera sees the background but no ball. In all other frames, the camera sees both the background and the ball, with the ball appearing in different locations as it passes by the camera. In frames 1, 2 and 3, the pitch passes in front of the camera from right to left. The batted ball, seen in frames 4 and 5, pass from left to right" (Col 4, Lines 17-25). The claimed limitation of "an output unit, when any retrieval data is selected as retrieval condition from among the retrieval data inputted by the input, extracting picture data corresponding to the selected retrieval data from the storage unit and displaying the extracted picture data" is met by the image processor and TV display. "A hitter, filmed at high speed, proceeds through a normal hitting sequence which is broken down into steps shown in the table of FIG. 8. The film is digitized and analyzed by software, and the resulting data is then available in the database and may be viewed by interested parties in a variety of formats" (Col 5, Lines 3-8).

In regard to claims 2-4, the claimed limitation of "said subject is a player of a ball game being performed, and said retrieval data contains information about a delivery of a ball", "said subject is a player of a ball game being performed, and said retrieval data contains information about a course of a ball" and "said subject is a player of a ball game being performed, and said retrieval data contains information about a play state in the play of the ball game" are met by Figure 1. "In a baseball environment, then, the system may be used to provide all relevant information on how the hitter and/or pitcher move, including all relevant steps associated with the pitch and hit of the ball, including all relevant movements of the ball itself" (Col 3, Lines 35-39). Furthermore, "the invention may be used to surreptitiously analyze the performance of players without them knowing it, for example, on an opposing team" (Col 6, Lines 50-53).

In regard to claims 5 and 6, the claimed limitation of "said segmentation information comprises a record starting time and a record ending time which are absolute times" and "said subject a player of ball game being performed, and said record starting time said record ending time are record starting time and a record ending time each delivery of a ball" are met by Figures 11A-D. Figure 10 depicts the relative recorded times with respect to the windup. Figures 11A-D shows the recorded absolute time in the upper left corner.

In regard to claim 7, the claimed limitation of "an input unit inputting common segmentation information indicating a time slice common to plural different pieces of picture data continuous in time series about a subject, and retrieval data indicating an attribute of the subject corresponding to each piece of picture data assigned to each

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time slice" is met by Figures 2, 7 and 11A-D. "The video cameras are preferably high-speed digital type cameras facilitating recording at a rate of 1,000 frames per second or greater. Such cameras, which may be purchased from the Kodak Company as Model Ektapro may be used to measure all pitched and batted ball characteristics, including speeds, pitcher movements, pitch type, location at the batter, and direction of hit" (Col 3, Lines 54-59). "FIGS. 11A to 11D depict a variety of batter images captured according to the invention along with statistical data superimposed thereon" (Col 6, Lines 46-48).

The claimed limitation of "a storage unit segmenting the plural pieces of continuous picture data according to the common segmentation information, associating each piece of picture data obtained by segmenting the data with the corresponding retrieval data, and storing the associated data" is also met Figures 2, 7 and 11A-D. "Each device is continuously monitored by the computer system 110, and once the devices are set out in the evaluation area, all devices make completely automatic measurements of each pitch and hit without any action of the operator" (Col 3, Lines 48-52). "The sequence of video pictures or frames seen by the side-view camera for ball position 0 through 5 is shown in the sketches in the bottom of FIG. 2. In frame 0 the camera sees the background but no ball. In all other frames, the camera sees both the background and the ball, with the ball appearing in different locations as it passes by the camera. In frames 1, 2 and 3, the pitch passes in front of the camera from right to left. The batted ball, seen in frames 4 and 5, pass from left to right" (Col 4, Lines 17-25). The claimed limitation of "an output unit, when any retrieval data is selected as retrieval condition from among the retrieval data inputted by the input, extracting picture data

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corresponding to the selected retrieval data from the storage unit and displaying the extracted picture data" is met by the image processor and TV display. "A hitter, filmed at high speed, proceeds through a normal hitting sequence which is broken down into steps shown in the table of FIG. 8. The film is digitized and analyzed by software, and the resulting data is then available in the database and may be viewed by interested parties in a variety of formats" (Col 5, Lines 3-8).

In regard to claim 8, the claimed limitation of "said plural pieces of continuous picture data are different from each other and obtained by capturing the subject from plural directions" is met by Figure 1. "The video cameras are preferably high-speed digital type cameras facilitating recording at a rate of 1,000 frames per second or greater. Such cameras, which may be purchased from the Kodak Company as Model Ektapro may be used to measure all pitched and batted ball characteristics, including speeds, pitcher movements, pitch type, location at the batter, and direction of hit. The cameras may be set up to view the field in front of the batter from overhead and from the side, as shown in FIG. 1" (Col 3, Lines 54-61).

In regard to claims 9-11, the claimed limitation of "said subject is a player of a ball game being performed, and said retrieval data contains information about a delivery of a ball", "said subject is a player of a ball game being performed, and said retrieval data contains information about a course of a ball" and "said subject is a player of a ball game being performed, and said retrieval data contains information about a play state in the play of the ball game" are met by Figure 1. "In a baseball environment, then, the system may be used to provide all relevant information on how the hitter and/or pitcher

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move, including all relevant steps associated with the pitch and hit of the ball, including all relevant movements of the ball itself" (Col 3, Lines 35-39). Furthermore, "the invention may be used to surreptitiously analyze the performance of players without them knowing it, for example, on an opposing team" (Col 6, Lines 50-53).

In regard to claims 12 and 13, the claimed limitation of "said segmentation information comprises a record starting time and a record ending time which are absolute times" and "said subject a player of ball game being performed, and said record starting time said record ending time are record starting time and a record ending time each delivery of a ball" are met by Figures 11A-D. Figure 10 depicts the relative recorded times with respect to the windup. Figures 11A-D shows the recorded absolute time in the upper left corner.

In regard to claim 14, the claimed limitation of "inputting retrieval data about picture data continuous in time series about a subject, the retrieval data containing segmentation information indicating a time slice for each piece of the picture data" is met by Figures 2, 7 and 11A-D. "The video cameras are preferably high-speed digital type cameras facilitating recording at a rate of 1,000 frames per second or greater. Such cameras, which may be purchased from the Kodak Company as Model Ektapro may be used to measure all pitched and batted ball characteristics, including speeds, pitcher movements, pitch type, location at the batter, and direction of hit" (Col 3, Lines 54-59). "FIGS. 11A to 11D depict a variety of batter images captured according to the invention along with statistical data superimposed thereon" (Col 6, Lines 46-48). The claimed limitation of "segmenting the continuous picture data according the

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segmentation information, storing the segmented picture data after being associated with the retrieval data" is also met Figures 2, 7 and 11A-D. "Each device is continuously monitored by the computer system 110, and once the devices are set out in the evaluation area, all devices make completely automatic measurements of each pitch and hit without any action of the operator" (Col 3, Lines 48-52). "The sequence of video pictures or frames seen by the side-view camera for ball position 0 through 5 is shown in the sketches in the bottom of FIG. 2. In frame 0 the camera sees the background but no ball. In all other frames, the camera sees both the background and the ball, with the ball appearing in different locations as it passes by the camera. In frames 1, 2 and 3, the pitch passes in front of the camera from right to left. The batted ball, seen in frames 4 and 5, pass from left to right" (Col 4, Lines 17-25). The claimed limitation of "when any retrieval data is selected as retrieval condition from among the retrieval data inputted by the input, extracting picture data corresponding to the selected retrieval data from the storage unit and displaying the extracted picture data" is met by the image processor and TV display. "A hitter, filmed at high speed, proceeds through a normal hitting sequence which is broken down into steps shown in the table of FIG. 8. The film is digitized and analyzed by software, and the resulting data is then available in the database and may be viewed by interested parties in a variety of formats" (Col 5, Lines 3-8).

In regard to claim 15, the claimed limitation of "an input unit inputting retrieval data about plural different pieces picture data continuous time series about subject, the retrieval data containing common segmentation information indicating time slice

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common the plural different pieces picture data" is met by Figures 2, 7 and 11A-D. "The video cameras are preferably high-speed digital type cameras facilitating recording at a rate of 1,000 frames per second or greater. Such cameras, which may be purchased from the Kodak Company as Model Ektapro may be used to measure all pitched and batted ball characteristics, including speeds, pitcher movements, pitch type, location at the batter, and direction of hit" (Col 3, Lines 54-59). "FIGS. 11A to 11D depict a variety of batter images captured according to the invention along with statistical data superimposed thereon" (Col 6, Lines 46-48). The claimed limitation of "storage segmenting continuous picture data according common segmentation information, and storing the segmented picture after being associated With the retrieval data" is also met Figures 2, 7 and 11A-D. "Each device is continuously monitored by the computer system 110, and once the devices are set out in the evaluation area, all devices make completely automatic measurements of each pitch and hit without any action of the operator" (Col 3, Lines 48-52). "The sequence of video pictures or frames seen by the side-view camera for ball position 0 through 5 is shown in the sketches in the bottom of FIG. 2. In frame 0 the camera sees the background but no ball. In all other frames, the camera sees both the background and the ball, with the ball appearing in different locations as it passes by the camera. In frames 1, 2 and 3, the pitch passes in front of the camera from right to left. The batted ball, seen in frames 4 and 5, pass from left to right" (Col 4, Lines 17-25). The claimed limitation of "an output unit, when any retrieval data is selected as retrieval condition from among the retrieval data inputted by the input, extracting picture data corresponding to the selected retrieval data from the

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storage unit and displaying the extracted picture data" is met by the image processor and TV display. "A hitter, filmed at high speed, proceeds through a normal hitting sequence which is broken down into steps shown in the table of FIG. 8. The film is digitized and analyzed by software, and the resulting data is then available in the database and may be viewed by interested parties in a variety of formats" (Col 5, Lines 3-8).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Manning whose telephone number is 571-272-7352. The examiner can normally be reached on M-F: 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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JM

May 9, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600